

REMARKS

Reconsideration and allowance of the application are respectfully requested in light of the following remarks.

The Applicants acknowledge with appreciation the indication in the Office Action that claims 34 and 38-49 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 30, 32, 33, 35, 36, 37, 50, 51 and 52 were rejected under 35 U.S.C. §102(e) as being anticipated by Lee et al. (US 2005/0058154) (hereinafter, “Lee”). The Applicants respectfully disagree with the rejections and traverse based on the points set forth below.

By way of review, claim 30 is directed towards a method for transmitting data packets and recites the features of:

“30. A method for transmitting data packets from a mobile terminal to a base station using a hybrid automatic repeat request protocol and soft combining of received data, the method comprising:

transmitting a data packet from the mobile terminal to the base station via a first data channel,

receiving a feedback message from the base station at the mobile terminal, wherein the feedback message indicates whether the data packet has been successfully received by the base station, and

in case the feedback message indicates that the data packet has not been received successfully, transmitting a retransmission data packet from the mobile terminal to the base station via a second data channel, wherein a transmission time interval of the first data channel is smaller than a transmission time interval of the second data channel.” (emphasis added)

Despite the allegations in the Office Action, Lee fails to disclose, either expressly or inherently, the feature of “*...wherein a transmission time interval of the first data channel is smaller than a transmission time interval of the second data channel,*” as recited by claim 30.

By way of review, Lee discloses a mobile communication system and method for retransmitting data through a reverse link in a packet data system using ARQ (Automatic Repeat reQuest). From the passages cited in the Office Action, it is further apparent that Lee teaches a technique including the transmission of a data packet from a mobile terminal to a base station via a first data channel and receiving a feedback message from the base station at the mobile terminal, wherein the feedback message indicates whether the data packet has been successfully received by the base station or not. Furthermore, Lee teaches that if the feedback message indicates that the data packet has not been successfully received, a retransmission data packet is sent from the mobile terminal to the base station.

Lee teaches that the retransmission data packet is sent via a separate second data channel which is distinct from the first data channel. As part of the disclosure of a first embodiment (see Lee, paragraph [0088]), Lee discloses a “sub”-embodiment which is initially described in paragraph [0119] of Lee and which is related to a CDM (Code Division Multiplex) system in which the “...reverse supplemental channel 1 is always used as a physical channel for new transmission and the reverse supplemental channel 2 is always used as a physical channel for retransmission.” (see Lee, paragraph [0122])

Furthermore, the passage in paragraph [0131] of Lee discloses that the two reverse supplemental channels are distinct channels using different Walsh codes.

Also, Lee discloses, in a first embodiment, the use of “incremental redundancy in all

cases of retransmission regardless of a code rate, whereby excessive energy consumption is prevented on retransmission.” (see paragraph [0088]). In this connection, Lee suggests sending a retransmission at a retransmission energy which is adjusted so that the receiving energy of the retransmitted packet will be 25% of the receiving energy of the initial transmission energy of the data to be retransmitted (see paragraphs [0112] to [0115] and [0136]).

The Office Action alleges that the teachings in paragraph [0112] of Lee teaches the feature of: “*...wherein a transmission time interval of the first data channel is smaller than a transmission time interval of the second data channel.*” as recited by claim 30. However, neither paragraph [0112], nor any other portions of Lee, does not disclose this feature of claim 30.

First, it is noted that the passages in paragraphs [0112] to [0115], referred to by the Office Action, relate to a “sub”-embodiment directed towards a TDM (Time Division Multiplex) system (see paragraph [0111]), while the remaining portions of Lee cited to in the rejection of claim 30 (e.g., paragraphs [0122], [0124] and [0131]) relate to another embodiment directed to a CDM system (see, e.g., paragraph [0119] of Lee). Hence, only the teaching with respect to the CDM system embodiment, disclosed in paragraph [0119] et. seq., teaches the use of two reverse supplemental channels for initial transmission and retransmission, respectively. Therefore, the Office Action inappropriately relied on two separate and distinct embodiments which are incompatible to allege anticipation of claim 30. As the Federal Circuit recently confirmed, “[f]or a claim to be anticipated, each claim element must be disclosed, either expressly or inherently, in a single prior art reference, and the claimed arrangement or combination of those elements must also be disclosed, either expressly or inherently, in that same prior art reference.” Therasense, Inc. v. Becton, Dickinson and

Company, 593 F.3d 1325, 1332-33 (Fed. Cir. 2010) (emphasis added). Here, the Office Action improperly relies on teachings by Lee which are directed towards completely separate embodiments (the TDM v. CDM embodiments) in rejecting claim 30, and thus has failed to establish that Lee discloses the claimed arrangement of the features recited by claim 30.

Accordingly, it is respectfully submitted that allowance of claim 30 and all claims dependent therefrom is warranted for at least this reason.

Secondly, the teachings of Lee in paragraphs [0112]-[0115] and [0136] do not teach that the transmission time interval on a “first channel” (which the Office Action alleges corresponds to the reverse supplemental channel 1 in Lee) provides an initial transmission which “is smaller than” a transmission time interval of a “second channel” (which the Office action alleges corresponds to the reverse supplemental channel 2 in Lee) that is used for a retransmission, as recited by claim 30. Instead, the basic suggestion in the technique of Lee is to retransmit the data and adjust the transmission energy so that the receiving energy of the retransmitted packet will be 25% of the receiving energy for the initial transmission energy. Furthermore, Lee discloses that the adjusted transmission energy is translated into a corresponding bit rate given in kilobits per second (kbps) (see paragraph [0113] and paragraph [0136], disclosing that 9.6 kbps is 25% of 38.4 kbps).

It is further noted that the use of more or less transmission power for retransmission alone does not imply that a retransmission is performed faster or that the retransmission time interval (e.g., the slot size) is changed in comparison to the channel providing the initial transmission. In fact, the TDM system referred to in paragraphs [0111]-[0115] of Lee commonly uses an equal slot size on its channels and, in the absence of any indication to the

contrary by Lee, one skilled in the art would not assume that different slot sizes or transmission time intervals could or should be used (even when neglecting, for the sake of argument, that Lee fails to teach two distinct channels for initial transmission and retransmission in connection with the TDM system embodiment, as explained above).

Moreover, with respect to the CDM system disclosed in Lee, Lee fails to disclose that the transmission time interval (e.g., slot size) would be different on the reverse supplemental channel 1 and reverse supplemental channel 2 mentioned in paragraph [0122] of Lee. Moreover, this CDM embodiment of Lee does not even relate to adjusting transmission time intervals, so Lee clearly fails to disclose, either expressly or inherently, using distinct transmission time intervals.

Finally, it is noted that the Office Action (pg. 3) alleges that it is “clear” from paragraph [0112] that Lee discloses “...the first time interval here which is the initial transmission, is smaller than the second time interval which is the retransmission.” However, paragraph [0112] of Lee does not even mention transmission time intervals at all, and thus, despite the allegations in the Office Action, Lee does not clearly teach this feature of claim 30, and in fact, Lee does not even mention this feature of claim 30.

As a result, Lee fails to disclose, either expressly or inherently, at least the feature of “...wherein a transmission time interval of the first data channel is smaller than a transmission time interval of the second data channel,” as recited by claim 30.

Accordingly, the Applicants respectfully submit that Lee fails to disclose, either expressly or inherently, at least this above-noted feature of claim 30, and that allowance of claim 30 and all claims dependent therefrom is warranted for at least this reason. Claims 51 and 52

similarly recite the above-mentioned subject matter distinguishing claim 30 from Lee, though do so with respect to a mobile terminal and a base station, respectively. Accordingly, it is respectfully submitted that allowance of claims 30, 51 and 52 and all claims dependent therefrom is warranted for at least these reasons.

In view of the above, it is submitted that this application is in condition for allowance and a notice to that effect is respectfully solicited.

If any issues remain which may best be resolved through a telephone communication, the Examiner is requested to telephone the undersigned at the local Washington, D.C. telephone number listed below.

Respectfully submitted,

/James Edward Ledbetter/

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